DOCUMENT RESUME

ED 358 785 HE 026 516

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TITLE	Graduate Enrollment and Degrees: 1986 to 1991.
INSTITUTION	Council of Graduate Schools, Washington, DC.
PUB DATE	Jun 93
NOTE	77p.
AVAILABLE FROM	Council of Graduate Schools, One Dupont Circle, N.W., Suite 430, Washington, DC 20036 (free).
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Citizenship; Degrees (Academic); *Enrollment; Enrollment Trends; Ethnicity; *Graduate Students; Graduate Study; Higher Education; School Surveys; Sex Differences; *Student Characteristics

ABSTRACT

This report presents a summary of the findings of the first 6 years of a survey of graduate enrollment in 588 institutions in the United States. The enrollment survey was mailed each year to the approximately 630 institutions who are members of the Council of Graduate Schools or one of the four regional graduate associations. The tables and accompanying analyses are divided into two chapters. Chapter 1 highlights the results of the fall 1991 survey, including a profile of graduate enrollment for each of the four regional associations. The second chapter describes trends in graduate enrollment and degrees over the 1986 to 1991 period. Analysis indicates that graduate enrollment has increased an average of 2 percent per year between 1986 and 1991, that numbers of women increased slightly faster than numbers of men, and that health sciences, public administration, and the humanities and arts exhibited the greatest average enrollment growth. A feature of the report is the subdividing of doctoral institutions into two categories, Research I (Carnegie Classification system) and Doctorate-Granting (all other institutions granting the doctorate). The 1991 taxonomy now includes the biological sciences and health sciences as separate fields. Appendixes contain a copy of the survey questionnaire, a taxonomy display, and methodological information. (JB)

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Graduate Enrollment and Degrees:
1986 to 1991

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June 1993

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Introduction

This report presents a summary of the findings of the first six years of the CGS/GRE Survey of Graduate Enrollment, a joint project of the Council of Graduate Schools and the Graduate Record Examinations Board[1]. The Enrollment Survey is mailed each year to the approximately 630 institutions that are members of the Council of Graduate Schools or one of the four regional graduate associations--the Conference of Southern Graduate Schools (CSGS), the Midwestern Association of Graduate Schools (MAGS), the Northeastern Association of Graduate Schools (NAGS), and the Western Association of Graduate Schools (WAGS)[2].

The tables and analyses that follow are divided into two chapters. Chapter 1 highlights the results of the fall 1991 survey, including a profile of graduate enrollment for each of the four regional associations. The second chapter describes trends in graduate enrollment and degrees over the 1986 to 1991 period. The data in Chapter 2 describing year-to-year changes in enrollment and degrees includes data from the approximately 400 institutions that responded in all six survey years.

A feature of this report is the subdividing of doctoral institutions into two categories, Research I (based on the Carnegie Classification system) and Doctorate-Granting (all other institutions that grant the doctorate as their highest degree). This categorization was undertaken in response to requests from CGS members for data that are more directly comparable to individual institutions.

The 1991 taxonomy now includes the biological sciences and the health sciences as separate fields. Both had been grouped together as "life sciences" in previous reports.

This document is part of the continuing CGS effort to provide information useful to graduate administrators. Comments or suggestions for improving this report--or for additional types of publications--are welcome.

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[1]CGS would like to thank the GRE Board staff -- especially Jackie Briel and Cindy Evans -- for their work in conducting the Survey of Graduate Enrollment.

[2]This report represents responses from 588 of the 632 institutions surveyed. The survey population of the CGS/GRE Survey of Graduate Enrollment is limited to graduate institutions in the United States. Data on graduate enrollment and degrees in Canadian institutions are published by the Canadian Association of Graduate Schools in *Statistical Report 1992*.

Chapter 1

Fall 1991 Graduate Enrollment

Table 1.1

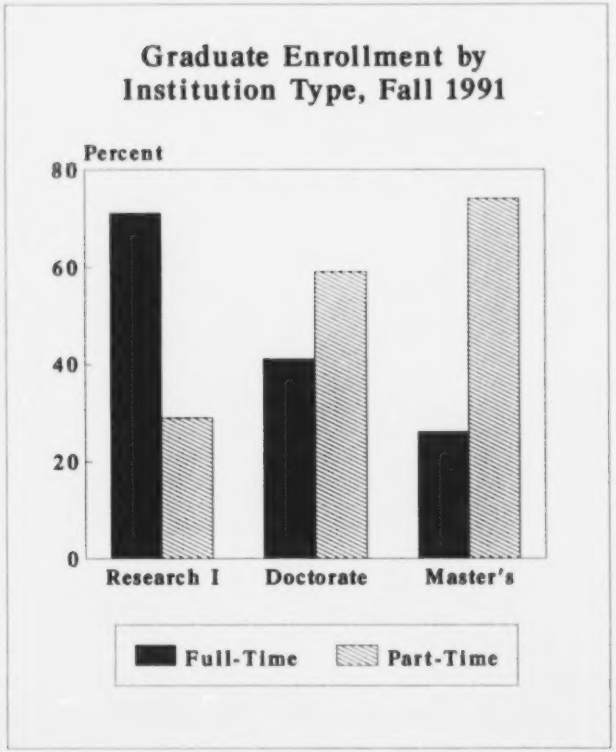
Profile of Fall 1991 Graduate Enrollment

Institution Type	Total	Men		Women		Full-Time		Part-Time	
Total	1,125,653	537,007	*49%*	568,104	*51%*	507,265	*47%*	562,233	*53%*
Public	794,518	370,504	*47%*	411,073	*53%*	357,011	*48%*	394,158	*52%*
Private	331,135	166,503	*51%*	157,031	*49%*	150,254	*47%*	168,075	*53%*
Research I*	353,956	197,827	*56%*	156,129	*44%*	239,243	*70%*	101,819	*30%*
Public	264,900	144,099	*54%*	120,801	*46%*	169,763	*67%*	82,243	*33%*
Private	89,056	53,728	*60%*	35,328	*40%*	69,480	*78%*	19,576	*22%*
Doctorate-Granting	536,121	251,650	*48%*	270,219	*52%*	210,272	*41%*	298,475	*59%*
Public	357,777	164,793	*47%*	184,710	*53%*	145,433	*43%*	195,122	*57%*
Private	178,344	86,857	*50%*	85,509	*50%*	64,839	*39%*	103,353	*61%*
Master's-Granting*	235,576	87,530	*38%*	141,756	*62%*	57,750	*26%*	161,939	*74%*
Public	171,841	61,612	*37%*	105,562	*63%*	41,815	*26%*	116,793	*74%*
Private	63,735	25,918	*42%*	36,194	*58%*	15,935	*26%*	45,146	*74%*

NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages are based on total of known gender or enrollment status.

*Institutions are subdivided into three categories based on the Carnegie Classification of Institutions of Higher Education and degrees granted. Research I: The 70 most research-intensive universities in the U.S. Annually, these institutions each confer at least 50 doctoral degrees and receive at least $33.5 million in federal research support. Doctorate-Granting: Institutions not classified as Research I in the Carnegie system that grant the doctorate as their highest degree. Master's-Granting: Institutions that grant the master's degree as their highest graduate degree.

Source: CGS/GRE Survey of Graduate Enrollment



- CGS member and affiliated graduate institutions enrolled over 1.1 million graduate students in the fall of 1991. The 588 responding institutions reported that women represented a majority of graduate students, accounting for 51 percent of graduate enrollment (568,104 students) while men were 49 percent of graduate enrollment (537,007 students).

- Seven in ten students pursue graduate programs at public institutions, which enrolled 794,518 graduate students in 1991.

- Institutions in the Doctorate-Granting category accounted for 48 percent of total graduate enrollment, followed by Research I with 31 percent, and Master's-Granting institutions with 21 percent of graduate enrollment.

- Consistent with earlier years, the majority of graduate students were enrolled on a part-time basis, with 53 percent of graduate enrollment reported as part-time and 47 percent as full-time.

- The figures in Table 1.1 highlight the broad differences across type of institution. For example, the graduate student population at Research I institutions is predominantly male (56 percent) and full-time (70 percent). Doctorate-Granting institutions, in contrast, report a higher proportion of women graduate students, and 59 percent of their students as part-time. Women constitute 62 percent of graduate enrollment at Master's institutions and almost three-quarters of the graduate students that attend on a part-time basis.

Table 1.2

Graduate Enrollment by Field, Fall 1991

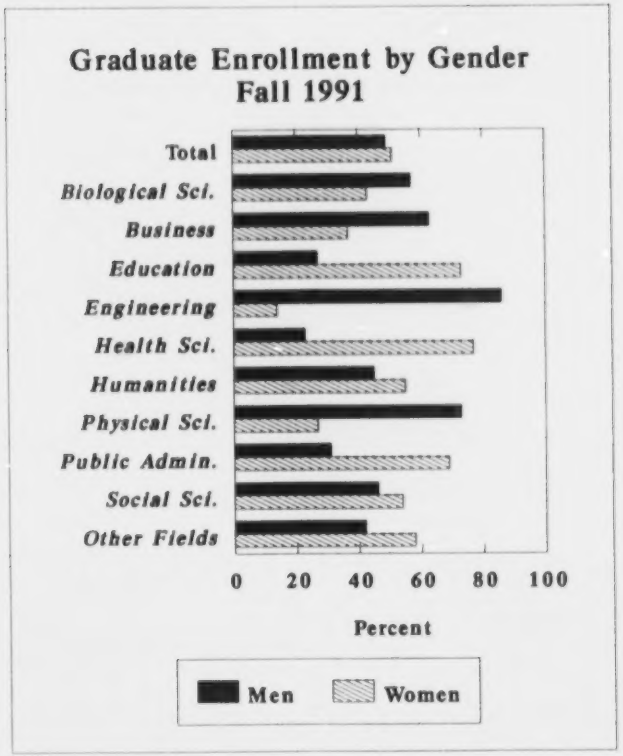
Major Field	Total	Men		Women		Full-Time		Part-Time	
Total	1,125,653	537,007	*49%*	568,104	*51%*	507,265	*47%*	562,233	*53%*
Biological Sciences*	55,203	31,109	*57%*	23,596	*43%*	38,855	*74%*	13,507	*26%*
Business	171,519	104,808	*63%*	61,128	*37%*	62,965	*39%*	100,389	*61%*
Education	229,984	58,605	*27%*	160,471	*73%*	58,242	*28%*	151,288	*72%*
Engineering	99,919	84,756	*86%*	13,378	*14%*	57,747	*60%*	38,688	*40%*
Health Sciences	61,135	13,963	*23%*	45,933	*77%*	29,371	*50%*	29,041	*50%*
Humanities & Arts	94,709	41,732	*45%*	51,383	*55%*	57,835	*64%*	32,537	*36%*
Physical Sciences	92,122	66,432	*73%*	24,472	*27%*	57,108	*65%*	31,084	*35%*
Public Administration & Services	43,055	12,912	*31%*	29,370	*69%*	21,564	*53%*	19,501	*47%*
Social Sciences	95,916	43,517	*46%*	50,734	*54%*	55,768	*61%*	35,249	*39%*
Other Fields**	88,335	36,298	*42%*	49,615	*58%*	35,991	*43%*	47,589	*57%*

NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages are based on total of known gender or enrollment status.

*"Biological sciences" includes agriculture.

**The category "other fields" includes architecture, communications, home economics, library sciences, and religion.

Source: CGS/GRE Survey of Graduate Enrollment



- The fields of education and business enroll the largest numbers of graduate students, accounting for 22 and 17 percent of fall 1991 graduate enrollment, respectively. These two fields have the highest proportions of part-time students--both over 60 percent--of any of the fields in Table 1.2. At the same time, education and business contrast markedly in their percentages of men and women students (business 63 percent men, education 73 percent women).

- The fields of engineering, physical sciences, and business enrolled the highest percentages of men graduate students, while health sciences, education, and public administration had the highest shares of women students.

- In general, the distribution of enrollment by full- and part-time attendance parallels the most typical graduate degree awarded in a field. Where the master's degree predominates (business and education) most students attend part-time, and where the doctoral degree is the focal terminal degree (biological sciences, physical sciences, and humanities) full-time study is the norm. Engineering is the exception to this rule, where the master's degree is considered the professional terminal degree, but the majority of graduate students are enrolled on a full-time basis.

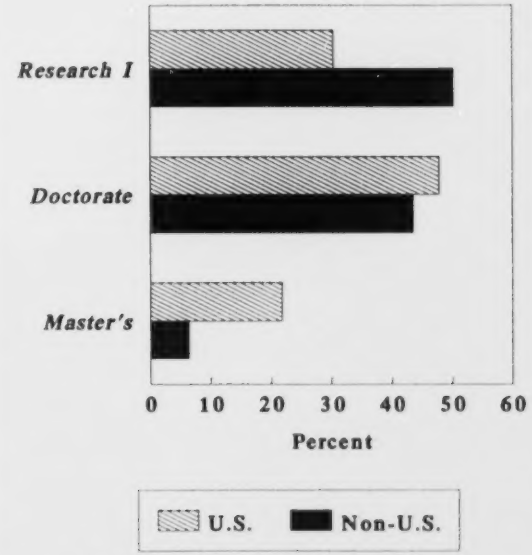
Table 1.3

Fall 1991 Graduate Enrollment by Institution Type and Citizenship

Institution Type	Total	U.S. Citizens and Permanent Residents		Non-U.S. Citizen Temporary Residents	
Total	1,125,653	852,937	*86%*	141,333	*14%*
Public	794,518	620,241	*86%*	100,174	*14%*
Private	331,135	232,696	*85%*	41,159	*15%*
Research I	353,956	258,464	*78%*	70,978	*22%*
Public	264,900	202,413	*79%*	52,257	*21%*
Private	89,056	56,051	*75%*	18,721	*25%*
Doctorate-Granting	536,121	408,162	*87%*	61,483	*13%*
Public	357,777	278,091	*87%*	42,046	*13%*
Private	178,344	130,071	*87%*	19,437	*13%*
Master's-Granting	235,576	186,311	*95%*	8,872	*5%*
Public	171,841	139,737	*96%*	5,871	*4%*
Private	63,735	46,574	*94%*	3,001	*6%*

NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages are based on total of known citizenship.
Source: CGS/GRE Survey of Graduate Enrollment

Distribution of Graduate Enrollment by Institution Type and Citizenship, 1991



- In the fall of 1991, 141,333 non-U.S. citizens enrolled in CGS member and affiliated institutions, accounting for 14 percent of graduate enrollment. A slightly higher percentage of non-U.S. graduate students enrolled at private than at public institutions.

- Institutional type was a major differentiating variable in the enrollment of non-U.S. students, reflecting the concentration of international students in doctoral programs in science and engineering fields. More than one-half (70,978) of the non-U.S. graduate students were enrolled at Research I institutions. These students represented a 22 percent share of total enrollment at Research I universities. Lower percentages of non-U.S. graduate students were reported by Doctorate-Granting and by Master's institutions, with 13 and 5 percent international enrollment, respectively.

Table 1.4

Fall 1991 Graduate Enrollment by Field and Citizenship

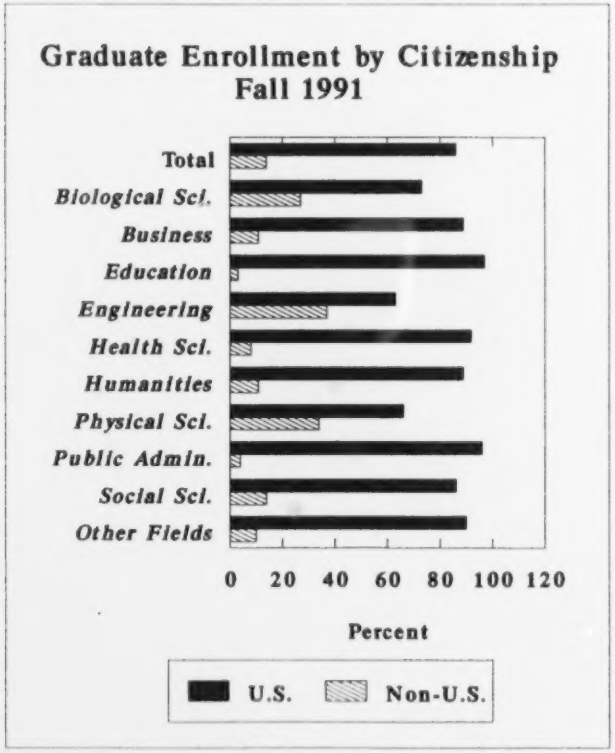
Major Field	Total	U.S. Citizens and Permanent Residents		Non-U.S. Citizen Temporary Residents	
Total	**1,125,653**	**852,937**	***86%***	**141,333**	***14%***
Biological Sciences*	55,203	37,614	*73%*	13,989	*27%*
Business	171,519	127,800	*89%*	15,744	*11%*
Education	229,984	189,546	*97%*	6,413	*3%*
Engineering	99,919	56,541	*62%*	33,994	*38%*
Health Sciences	61,135	49,842	*92%*	4,343	*8%*
Humanities & Arts	94,709	75,795	*89%*	9,248	*11%*
Physical Sciences	92,122	55,133	*66%*	28,321	*34%*
Public Administration & Service	43,055	37,925	*96%*	1,432	*4%*
Social Sciences	95,916	73,761	*86%*	11,767	*14%*
Other Fields**	88,335	69,086	*90%*	7,765	*10%*

NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages are based on total of known citizenship.

*"Biological sciences" includes agriculture.

**The category "other fields" includes architecture, communications, home economics, library sciences, and religion.

Source: CGS/GRE Survey of Graduate Enrollment



- Education and business are the two largest fields for U.S. citizen graduate enrollment, accounting for 41 percent of U.S. students. In contrast, non-U.S. citizens are concentrated primarily in science and engineering fields.

- Two fields--engineering and the physical sciences--had the highest percentages of non-U.S. citizen graduate enrollment, at 38 percent and 34 percent, respectively. The 33,994 foreign students in engineering and 28,128 in the physical sciences accounted for 47 percent of non-U.S. citizen graduate enrollment. For U.S. students, engineering and the physical sciences accounted for just 14 percent of graduate enrollment.

- Other fields with substantial foreign enrollment in 1991 were the biological sciences and social sciences, with 27 and 14 percent non-U.S. citizen enrollment, respectively.

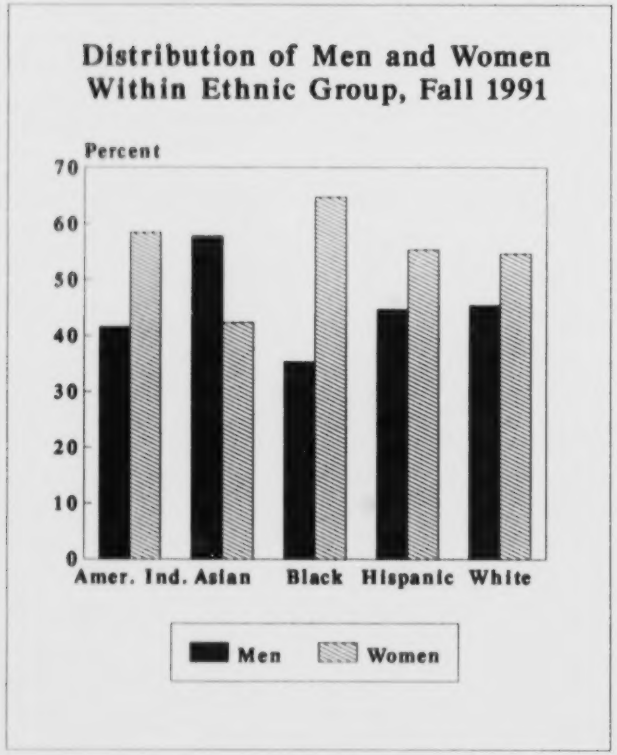
- Education and public administration were two fields with 5 percent or less foreign enrollment, again reflecting the concentration of international students in science and engineering programs.

Table 1.5

Graduate Enrollment by Ethnic Group and Sex, Fall 1991

Ethnic Group	Total		Men		Women	
Total U.S. Citizens and Permanent Residents	852,937	*100%*	370,129	*100%*	447,810	*100%*
American Indian	3,906	*<1%*	1,549	*<1%*	2,180	*<1%*
Asian	35,814	*4%*	20,090	*5%*	14,737	*3%*
Black	48,347	*6%*	16,383	*4%*	30,125	*7%*
Hispanic	34,903	*4%*	15,148	*4%*	18,811	*4%*
White	729,967	*86%*	316,959	*86%*	381,957	*85%*

NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages are based on total of U.S. citizens and permanent residents.
Source: CGS/GRE Survey of Graduate Enrollment



- Of the 852,937 U.S. citizen graduate students enrolled in surveyed institutions, 122,970, or 14 percent, were members of minority groups.
- Black Americans were the leading minority group among U.S. citizens, accounting for 48,347 students, or 39 percent, of fall 1991 minority graduate enrollment.
- The Hispanic and Asian groups enrolled roughly equal numbers of U.S. citizen graduate students, with approximately 35,000 and 36,000 students, respectively. A total of 3,906 American Indians enrolled in graduate programs in fall 1991.
- More women than men enrolled in graduate programs in every U.S. citizen ethnic group except for Asian Americans. For Black Americans, women's enrollment in graduate programs was nearly twice that of men (30,125 women and 16,383 men).

Table 1.6

Regional Profile of Graduate Enrollment, Fall 1991

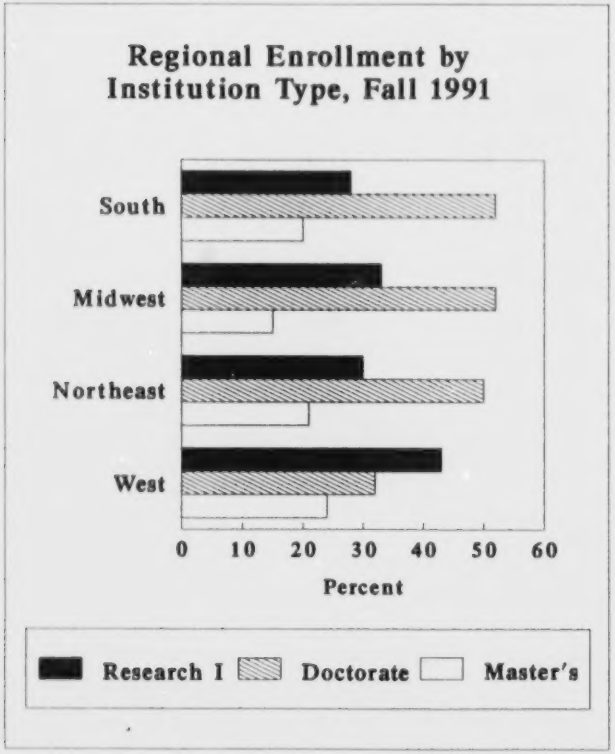
	CSGS*		MAGS*		NAGS*		WAGS*	
Total Enrollment	318,578	*100%*	333,348	*100%*	279,864	*100%*	182,592	*100%*
Public	268,823	*84%*	269,221	*81%*	134,551	*48%*	149,935	*82%*
Private	49,755	*16%*	64,127	*19%*	145,313	*52%*	32,657	*18%*
Research I	88,875	*28%*	110,442	*33%*	83,651	*30%*	79,015	*43%*
Doctorate-Granting	167,147	*52%*	173,461	*52%*	138,761	*50%*	59,094	*32%*
Master's-Granting	62,556	*20%*	49,445	*15%*	57,452	*21%*	44,483	*24%*
Men	150,981	*48%*	159,341	*49%*	130,812	*48%*	94,101	*52%*
Women	166,395	*52%*	165,627	*51%*	141,458	*52%*	88,491	*48%*
Full-time	135,594	*44%*	151,418	*47%*	113,195	*43%*	106,086	*62%*
Part-time	171,880	*56%*	171,707	*53%*	150,194	*57%*	65,091	*38%*
Non-U.S. Citizen Temporary Residents	37,155	*12%*	46,610	*15%*	35,125	*16%*	24,289	*16%*
U.S. Citizens and Permanent Residents**	265,312	*88%*	254,224	*85%*	189,904	*84%*	131,530	*84%*
American Indian	1,043	*<1%*	1,364	*<1%*	507	*<1%*	1,222	*1%*
Asian	6,382	*2%*	8,008	*3%*	8,742	*5%*	11,258	*9%*
Black	22,137	*8%*	12,426	*5%*	11,223	*6%*	4,159	*3%*
Hispanic	7,912	*3%*	4,684	*2%*	4,675	*2%*	8,672	*7%*
White	227,838	*86%*	227,742	*90%*	164,757	*87%*	106,219	*81%*

NOTE: A number of institutions are members of more than one regional association; accordingly, the totals of the four regionals sum to a number greater than total graduate enrollment.

* CSGS - Conference of Southern Graduate Schools; MAGS - Midwestern Association of Graduate Schools; NAGS - Northeastern Association of Graduate Schools; WAGS - Western Association of Graduate Schools.

** Percentages of enrollment for U.S. ethnic groups are based on number of U.S. citizens and permanent resident graduate students.

Source: CGS/GRE Survey of Graduate Enrollment



- Of the four regional associations, MAGS institutions enroll the largest number of graduate students, 333,348, followed by CSGS (318,578), NAGS (279,864), and WAGS (182,592).

- Graduate enrollment at the regional associations reflects the diversity of institutional types across regions. For example, because of the presence of historically Black institutions in the South, the CSGS region has the highest percentage of Black U.S. citizen enrollment of the four regions.

- In contrast to the predominance of public institutions in the other regions, private institutions in the NAGS region enroll 52 percent of the graduate students, reflecting the concentration of private institutions of higher education in the northeast.

- WAGS was the only region with a majority of full-time students and the highest percentage of enrollment in Research I institutions, indicating the influence of large research-oriented campuses, especially the University of California system, in the west.

Table 1.7

Graduate Applications by Field, Fall 1991

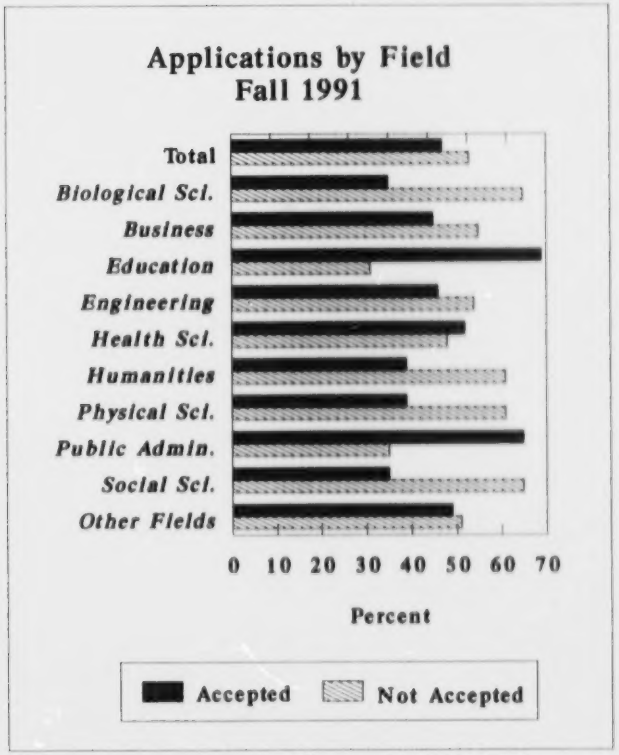
Major Field	Total Applications	Accepted Applications		Applications Not Accepted	
Total	955,066	441,283	47%	507,358	53%
Biological Sciences*	61,369	21,348	35%	39,848	65%
Business	133,969	59,767	45%	73,053	55%
Education	77,679	53,338	69%	23,415	31%
Engineering	129,021	58,918	46%	69,847	54%
Health Sciences	41,879	21,394	52%	19,929	48%
Humanities & Arts	106,936	41,531	39%	64,706	61%
Physical Sciences	113,001	44,246	39%	68,384	61%
Public Administration & Services	31,078	19,885	65%	10,686	35%
Social Sciences	119,417	40,830	35%	77,121	65%
Other Fields**	70,969	34,272	48%	36,453	52%

NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages are based on total of known acceptance status.

*"Biological sciences" includes agriculture.

**The category "other fields" includes architecture, communications, home economics, library sciences, and religion.

Source: CGS/GRE Survey of Graduate Enrollment



- Nearly one million applications were received for graduate study by CGS and affiliated institutions. Business and engineering were the leading fields in graduate applications for fall 1991, each accounting for 15 percent of the applications received. The social sciences and physical sciences followed closely, each with 13 percent.

- Slightly less than one-half of the 955,066 applications were accepted. The wide range of acceptance rates -- from a low of 35 percent for the social sciences to a high of 69 percent in education -- reflects the singular circumstance of those fields. Psychology programs (especially clinical psychology) receive literally hundreds of applications for very few openings, therefore generating an extremely low acceptance rate and in turn effecting the rate in social sciences overall.

- In contrast to psychology, graduate programs in education are often part of the service mission of universities, and therefore tend to have higher acceptance rates into master's programs. Public administration, which includes social work, is another field where the service mission of universities may result in a higher admission rate than the current 47 percent average.

Table 1.8

Graduate Degrees Awarded by Field, 1990–91

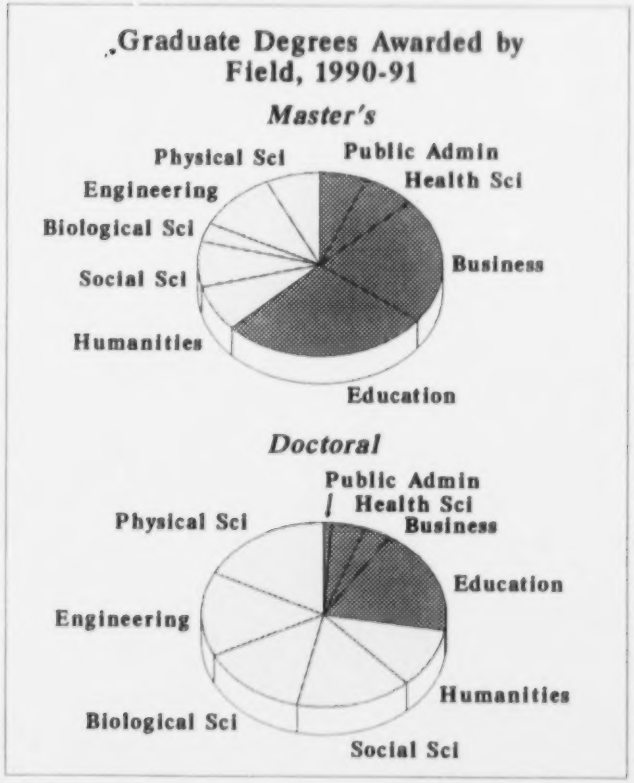
Major Field	Master's					Doctoral				
	Total	*Men*		*Women*		*Total*	*Men*		*Women*	
Total	255,195	110,684	*47%*	125,462	*53%*	35,783	21,543	*63%*	12,866	*37%*
Biological Sciences*	7,110	3,695	*55%*	3,014	*45%*	4,654	2,995	*66%*	1,559	*34%*
Business	48,573	30,186	*65%*	16,468	*35%*	1,140	830	*74%*	292	*26%*
Education	59,411	13,228	*24%*	41,466	*76%*	6,129	2,413	*41%*	3,516	*59%*
Engineering	22,910	18,596	*85%*	3,339	*15%*	4,892	4,270	*88%*	563	*12%*
Health Sciences	14,958	2,908	*21%*	11,001	*79%*	1,480	647	*44%*	814	*56%*
Humanities & Arts	17,709	6,874	*42%*	9,456	*58%*	3,473	1,772	*53%*	1,596	*47%*
Physical Sciences	15,692	10,116	*69%*	4,531	*31%*	5,781	4,428	*79%*	1,210	*21%*
Public Administration & Services	13,333	3,729	*29%*	8,974	*71%*	337	165	*50%*	168	*50%*
Social Sciences	17,723	7,275	*45%*	8,756	*55%*	5,038	2,493	*51%*	2,367	*49%*
Other Fields**	18,598	7,459	*43%*	10,014	*57%*	1,448	802	*57%*	605	*43%*

NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages are based on total of known gender.

*"Biological sciences" includes agriculture.

**The category "other fields" includes architecture, communications, home economics, library sciences, and religion.

Source: CGS/GRE Survey of Graduate Enrollment



- Responding institutions reported awarding 255,195 master's degrees and 35,783 doctoral degrees in the 1990-91 academic year.
- The largest numbers of master's degrees were awarded in the fields of education and business, accounting for 25 and 21 percent, respectively, of the master's degrees granted by the surveyed institutions.
- More than half of the master's degrees awarded in 1990-91 were received by women. In the fields of health sciences and education, women accounted for 79 and 76 percent of the master's degrees granted, respectively.
- Education was the leading field in the number of doctoral degrees, representing 18 percent of the doctorates awarded in 1990-91. Physical sciences and social sciences followed, collectively accounting for nearly one-third of the doctorates awarded.
- Approximately three-fifths of the 35,783 doctorates awarded were received by men. The highest proportion of men doctorate recipients were found in the fields of engineering, physical sciences, and business.

Chapter 2

Trends in Graduate Enrollment and Degrees, *1986 to 1991*

Note: This chapter contains two types of data, total figures for 1991 and trend data from 1986 to 1991 described by year-to-year percent change figures. To be included in the percent change calculations, institutions must have responded in all six survey years. Percent change data are used because not all institutions responded to all survey items each year. In the Chapter 2 tables, the statistic *average annual percent change* represents the average percent by which the graduate student population would change each year to account for the total change over the calculated period. This is analogous to a financial calculation which yields the periodic interest rate necessary for a present investment to grow to a given future value, compounded annually. The average percent change statistic provides a convenient summary measure of change over time and, like a moving average, is not influenced by unusual single-year fluctuations in the enrollment data.

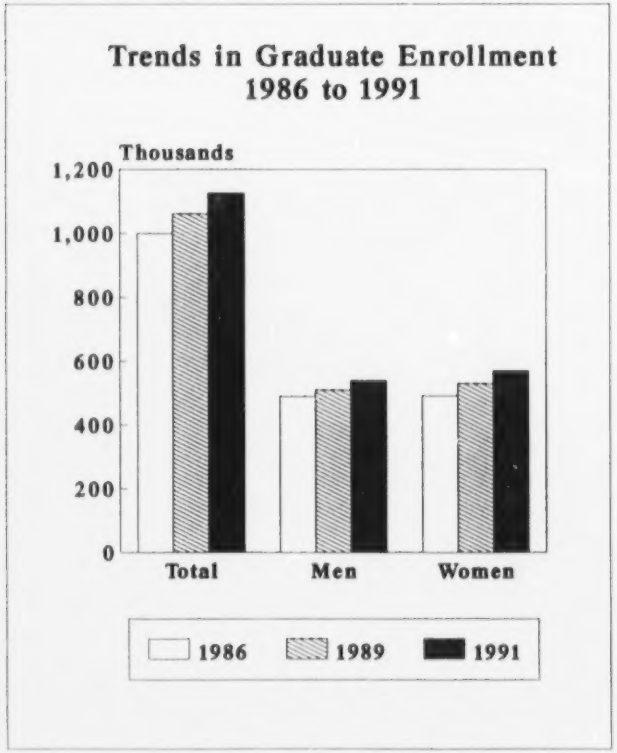
Table 2.1

Trends in Graduate Enrollment, 1986 to 1991

	1991	% Change *1990 to 1991*	Average Annual % Change *1986 to 1991*
Total Enrollment	1,125,653	*2%*	*2%*
Men	537,007	*3%*	*2%*
Women	568,104	*2%*	*3%*
Full-time	507,265	*6%*	*4%*
Part-time	562,233	*0%*	*1%*
Citizenship			
U.S. Citizens and Permanent Residents	852,937	*4%*	*2%*
Non-U.S. Citizen Temporary Residents	141,333	*5%*	*5%*

NOTE: Because not all institutions responded to all items, detail variables may not sum to total.

Source: CGS/GRE Survey of Graduate Enrollment



- Total graduate enrollment at CGS member and affiliated institutions has grown steadily, rising by an average of 2 percent per year between 1986 and 1991.
- The numbers of both men and women graduate students grew over the six-year period, with the number of women increasing at a slightly faster pace than the number of men.
- Enrollment of both full- and part-time students increased from 1986 to 1991, with the number of students pursuing graduate degrees on a full-time basis rising more rapidly than those involved in part-time study. From 1990 to 1991, however, this pattern has accelerated, with full-time enrollment rising by 6 percent, and part-time enrollment remaining virtually constant.
- At the same time, the numbers of both U.S. and non-U.S. citizens pursuing graduate degrees increased, but at different rates. The number of non-U.S. citizens grew approximately 5 percent annually from 1986 to 1991, while U.S. citizen enrollment has grown at a 2 percent rate. However, the growth in enrollment of U.S. citizens has increased recently, with the number of U.S. citizens and permanent residents rising by 4 percent from 1990 to 1991.

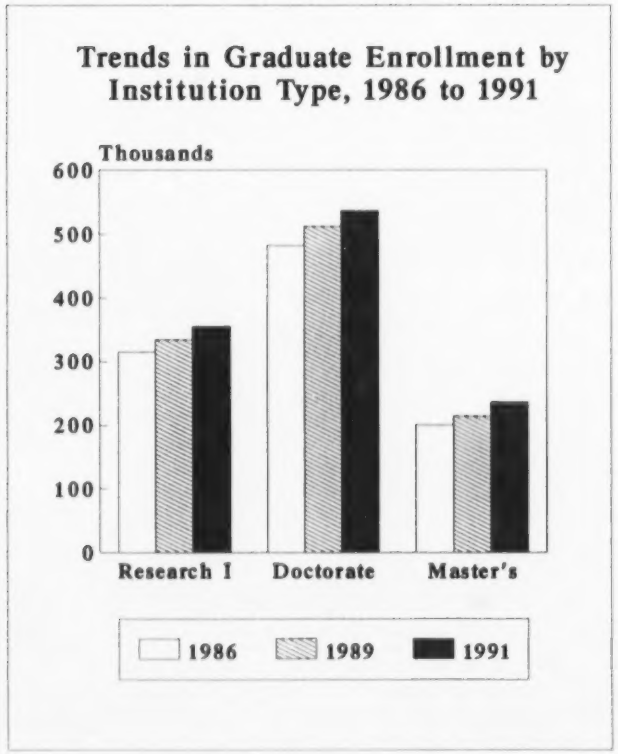
Table 2.2

Trends in Graduate Enrollment by Institution Type 1986 to 1991

Institution Type	1991	% Change *1990 to 1991*	Average Annual % Change *1986 to 1991*
Total Enrollment	1,125,653	*2%*	*2%*
Public	794,518	*2%*	*3%*
Private	331,135	*3%*	*2%*
Research I*	353,956	*2%*	*2%*
Public	264,900	*2%*	*3%*
Private	89,056	*2%*	*1%*
Doctorate-Granting*	536,121	*2%*	*2%*
Public	357,777	*1%*	*2%*
Private	178,344	*5%*	*2%*
Master's-Granting*	235,576	*1%*	*3%*
Public	171,841	*2%*	*3%*
Private	63,735	*0%*	*5%*

*Institutions are subdivided into three categories based on the Carnegie Classification of Institutions of Higher Education and degrees granted. Research I: The 70 most research-intensive universities in the U.S. Annually, these institutions each confer at least 50 doctoral degrees and receive at least $33.5 million in federal research support. Doctorate-Granting: Institutions not classified as Research I in the Carnegie system that grant the doctorate as their highest degree. Master's Granting: Institutions that grant the master's degree as their highest degree.

Source: CGS/GRE Survey of Graduate Enrollment



- The 1986 to 1991 increase in graduate enrollment occurred across all institution types but at varying growth rates. In general, graduate enrollment increased slightly more at public institutions than at private, although this finding is reversed at Master's-Granting institutions where there was an average annual growth of 5 percent at private institutions and of 3 percent at public institutions.

- Master's institutions also experienced the highest annual percentage increase from 1986 to 1991, growing by 3 percent per year. During this period, Research I and Doctorate-Granting institutions grew by an annual average of 2 percent.

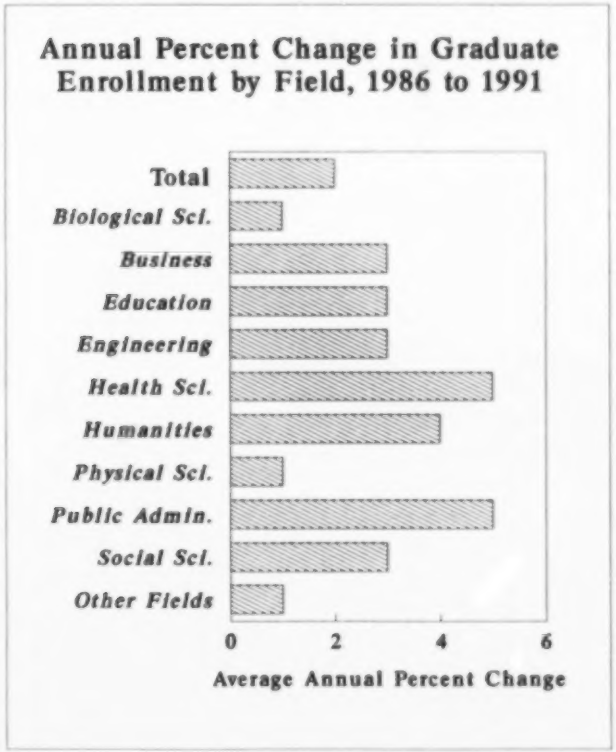
- From 1990 to 1991, Doctorate-Granting institutions were the sector with the highest growth rate. Private Doctorate-Granting institutions led this expansion in enrollment, increasing by 5 percent in the last year.

Table 2.3

Trends in Graduate Enrollment by Field, 1986 to 1991

Major Field	1991	% Change *1990 to 1991*	Average Annual % Change *1986 to 1991*
Total	1,125,653	*2%*	*2%*
Biological Sciences*	55,203	*2%*	*1%*
Business	171,519	*4%*	*3%*
Education	229,984	*0%*	*3%*
Engineering	99,919	*6%*	*3%*
Health Sciences	61,135	*8%*	*5%*
Humanities & Arts	94,709	*4%*	*4%*
Physical Sciences	92,122	*3%*	*1%*
Public Administration & Services	43,055	*6%*	*5%*
Social Sciences	95,916	*6%*	*3%*
Other Fields**	88,335	*8%*	*1%*

NOTE: Because not all institutions responded to all items, detail variables may not sum to total.
*"Biological sciences" includes agriculture.
**The category "other fields" includes architecture, communications, home economics, library sciences, and religion.
Source: CGS/GRE Survey of Graduate Enrollment



- The overall growth in graduate enrollment from 1986 to 1991 was reflected in increases in enrollment in all of the ten fields displayed in Table 2.3.
- Health sciences, public administration, and the humanities and arts exhibited the greatest average 1986 to 1991 enrollment growth of the ten graduate fields.
- In the last year, sharp enrollment increases were reported in health sciences, engineering, public administration, and the social sciences. Meanwhile, responding institutions reported virtually level enrollment in the field of education.

Table 2.4

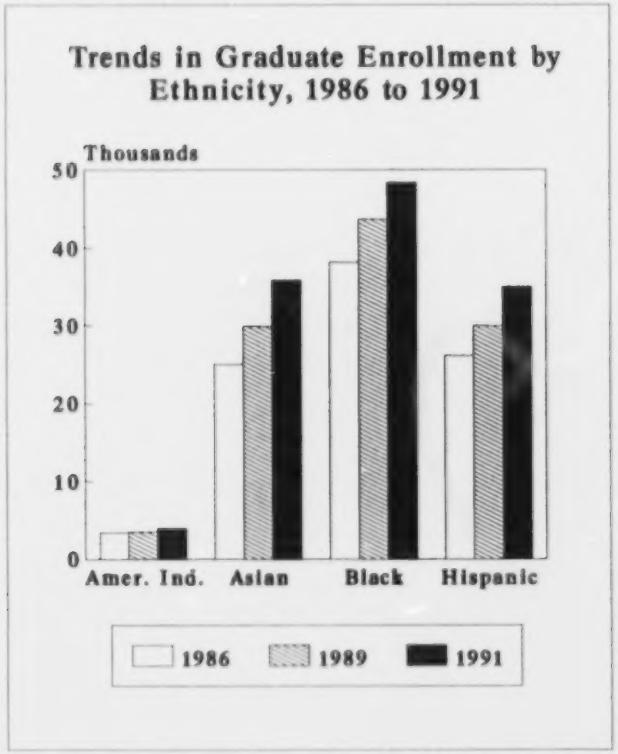
Trends in Graduate Enrollment by Ethnicity, 1986 to 1991

(U.S. Citizens and Permanent Residents Only)

	1991	% Change *1990 to 1991*	Average Annual % Change *1986 to 1991*
Total U.S. Enrollment	852,937	*4%*	*2%*
Men	370,129	*4%*	*2%*
Women	447,810	*4%*	*3%*
American Indian	3,906	*11%*	*2%*
Men	1,549	*10%*	*2%*
Women	2,180	*12%*	*4%*
Asian	35,814	*10%*	*7%*
Men	20,090	*12%*	*8%*
Women	14,737	*13%*	*9%*
Black	48,347	*6%*	*5%*
Men	16,383	*5%*	*4%*
Women	30,125	*7%*	*6%*
Hispanic	34,903	*7%*	*6%*
Men	15,148	*9%*	*7%*
Women	18,811	*8%*	*8%*
White	729,967	*3%*	*2%*
Men	316,959	*3%*	*1%*
Women	381,957	*3%*	*2%*

NOTE: Because not all institutions responded to all items, detail variables may not sum to total.

Source: CGS/GRE Survey of Graduate Enrollment



- As with total graduate enrollment, U.S. citizen enrollment increased from 1986 to 1991, with enrollment for women rising at a faster pace than that for men.

- When observed over the six-year 1986 to 1991 period, the survey results indicate notable growth in the enrollment of members of U.S. minority groups. Asian Americans showed the greatest average annual increase in enrollment, while the number of Hispanic and Black Americans enrolled in graduate programs grew by an average of 6 percent and 5 percent, respectively.

- Reported enrollment figures for American Indians fluctuated appreciably from 1986 to 1991, resulting in a modest average annual growth for this group. These fluctuations were likely a result of the relatively small numbers of individuals in this group.

- According to Table 2.4, the numbers of Asian, Hispanic, and Black men increased from 1986 to 1991. This increase is especially encouraging in light of concerns about the numbers of U.S. men participating in graduate programs.

Table 2.5

First–Time Enrollment of U.S. Citizens and Permanent Residents by Ethnic Group, 1986 to 1991

	1991	% Change *1990 to 1991*	Average Annual % Change *1986 to 1991*
Total U.S. Citizens and Permanent Residents	190,943	*2%*	*2%*
American Indian	1,047	*19%*	*2%*
Asian	9,188	*10%*	*9%*
Black	11,108	*2%*	*5%*
Hispanic	6,976	*8%*	*7%*
White	162,624	*1%*	*1%*

Source: CGS/GRE Survey of Graduate Enrollment

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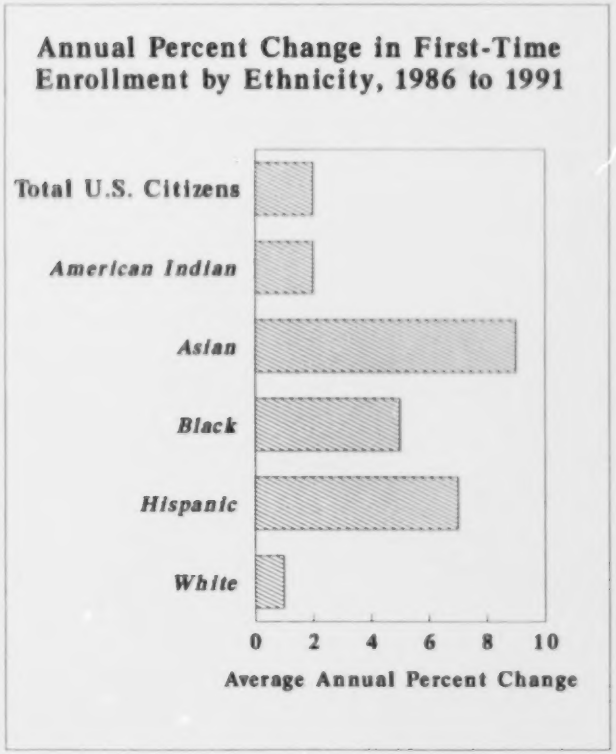


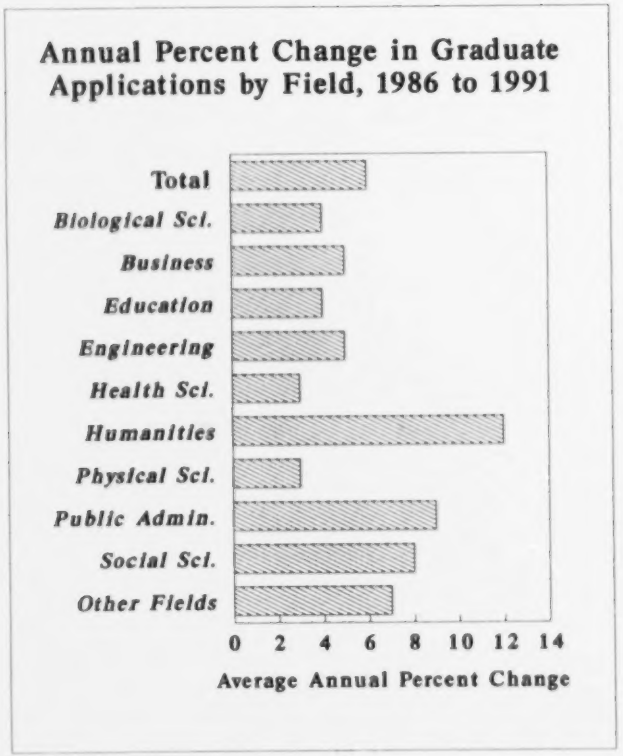
- First-time U.S. citizen and permanent resident graduate enrollment grew by a 2 percent annual average over the 1986 to 1991 period. That growth was fueled by substantial increases in the enrollment of Asian and Hispanic American graduate students.
- Asian Americans showed the largest 1986 to 1991 gain, increasing by an annual average of 9 percent, followed by Hispanic Americans with an average increase of 7 percent. First-time graduate enrollment of Black Americans also grew during this period by 5 percent annually, more than twice the average of U.S. citizens overall.
- The numbers of American Indian students attending graduate programs for the first time increased from 1986 to 1991 by 2 percent. Though reported figures for American Indians tend to fluctuate, the number of first-time enrollees in this group is currently at a record high.
- First-time graduate enrollment of White students grew slightly during this period, increasing by an annual average of 1 percent.

Table 2.6

Trends in Graduate Applications by Field, 1986 to 1991

Major Field	1991	% Change *1990 to 1991*	Average Annual % Change *1986 to 1991*
Total	955,066	*9%*	*6%*
Biological Sciences*	61,369	*6%*	*4%*
Business	133,969	*8%*	*5%*
Education	77,679	*3%*	*4%*
Engineering	129,021	*12%*	*5%*
Health Sciences	41,879	*14%*	*3%*
Humanities & Arts	106,936	*16%*	*12%*
Physical Sciences	113,001	*3%*	*3%*
Public Administration & Services	31,078	*13%*	*9%*
Social Sciences	119,417	*12%*	*8%*
Other Fields**	70,969	*8%*	*7%*

NOTE: Because not all institutions responded to all items, detail variables may not sum to total.
*"Biological sciences" includes agriculture.
**The category "other fields" includes architecture, communications, home economics, library sciences, and religion.
Source: CGS/GRE Survey of Graduate Enrollment



- Growth in the number of applications for graduate study has been strongly positive during the 1986 to 1991 period, resulting in an average annual increase of 6 percent. This growth has been especially rapid in recent years, yielding a 9 percent increase from 1990 to 1991.

- With the exception of education and the physical sciences, the numbers of graduate applications received in all fields increased more rapidly from 1990 to 1991 than in previous years. This was particularly true in health sciences and engineering, where the increase has more than doubled that of previous years.

- Graduate applications increased at the fastest pace in the humanities and arts, which experienced an average growth of 12 percent during the six-year period. Public administration and social sciences followed, increasing by an average of 9 and 8 percent, respectively.

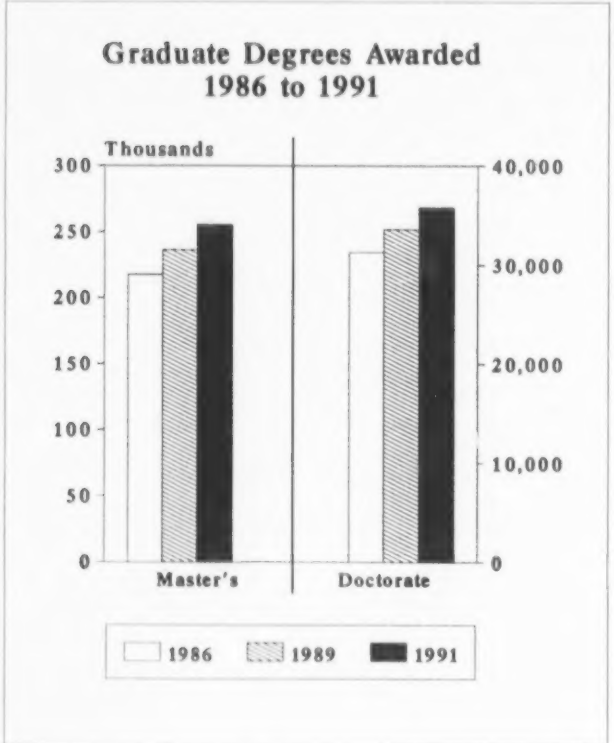
Note: Because these data are on *applications* and not *applicants*, the reader should recognize that some portion of these trends may stem from increases in the number of applications submitted per individual. However, in the absence of a marked change in the behavior of prospective graduate students, it is more likely that these data reflect a genuine increase in the number of individuals interested in graduate education.

Table 2.7

Graduate Degrees Awarded, 1986 to 1991

	1991	% Change *1990 to 1991*	Average Annual % Change *1986 to 1991*
Master's Degrees	**255,195**	***3%***	***3%***
Public	172,517	*4%*	*3%*
Private	82,678	*2%*	*3%*
Research I	74,009	*-1%*	*2%*
Doctorate-Granting	124,340	*6%*	*4%*
Master's-Granting	56,846	*4%*	*3%*
Doctoral Degrees	**35,783**	***4%***	***3%***
Public	25,257	*4%*	*4%*
Private	10,526	*3%*	*1%*
Research I	21,312	*5%*	*4%*
Doctorate-Granting	14,471	*3%*	*2%*

Source: CGS/GRE Survey of Graduate Enrollment



- The number of both master's and doctoral degrees granted during the 1986 to 1991 period increased by an annual average of 3 percent.
- All institutional categories exhibited increases in the granting of master's degrees from 1986 to 1991, with the number of master's degrees granted by Research I, Doctorate-Granting, and Master's institutions up by an annual average of 2, 4, and 3 percent, respectively.
- In contrast to the master's-degree trends of recent years, Research I institutions reported the largest growth in number of doctoral degrees granted, increasing by 5 percent from 1990 to 1991.

Appendixes

Appendix A

1991 CGS/GRE Survey of Graduate Enrollment Questionnaire

INSTITUTION NAME: _____ GRE INSTITUTION CODE: _____

I. Graduate Enrollment for 1991 Fall Term	FIRST TIME			TOTAL (Includes First Time)		
	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
Full Time						
Part Time						
TOTAL						

II. Number of Degrees Conferred between July 1, 1990, and June 30, 1991, by Sex	MASTER'S	DOCTORAL
Men		
Women		
TOTAL		

III. Number of Complete Applications Submitted for 1991 Fall Term	TOTAL
Accepted	
Not Accepted*	
TOTAL	

*includes rejected and other

IV. Graduate Enrollment by Ethnicity for 1991 Fall Term		FIRST TIME			TOTAL (Includes First Time)		
		MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL
Non-Resident Aliens							
U.S. Citizens & Resident Aliens	American Indian/Alaskan Native						
	Asian or Pacific Islander						
	Black, Non-Hispanic						
	Hispanic—TOTAL						
	Puerto Rican						
	Mexican American						
	Other Hispanic						
	White, Non-Hispanic						
Other or Unknown							
TOTAL (Should match total size in question I)							

Please provide as much information as you have available. If you cannot provide information for a particular question, or section of a question, please enter "NA" (Not Available) in the corresponding boxes and continue to the next question. Enter "0" (ZERO) when the information you are supplying is zero (for example, if you do not have part-time students you would enter "0" in all boxes pertaining to numbers of part-time students).

In questions I to IV, the sum of all categories should equal the total (i.e., men + women = total enrollment, full time + part time = total enrollment, etc.). If discrepancies are found within any question we will contact you for verification.

In question II, if the highest degree your institution offers is a master's or specialist degree, enter "X" (Does Not Apply) in the three boxes corresponding to number of doctoral degrees awarded.

Enrollment Status Definitions

First Time ..... Students admitted and enrolled for the first time in graduate degree programs at your institution for the fall term.

Full Time ..... Students enrolled for credit in graduate degree programs who are engaged full time in training activities in their field; these activities may embrace any appropriate combination of study, teaching, and research, depending on your institution's own policy.

Part Time ..... Students who are enrolled in graduate degree programs who are NOT pursuing graduate work full time as defined above.

Ethnicity Definitions

American Indian or Alaskan Native ..... A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.

Asian or Pacific Islander ..... A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa.

Black, Non-Hispanic .... A person having origins in any of the Black racial groups of Africa (except those of Hispanic origin).

Hispanic—Total ..... A person having origins in any of the original peoples of Puerto Rico, Mexico, Cuba, Central America, South America, or other Spanish culture, regardless of race. On the data sheet this total is further broken down into three Hispanic subgroups—Puerto Rican, Mexican American, and Other Hispanic (Cuban, Central American, South American or other Spanish culture).

White, Non-Hispanic ... A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).

Thank you for your help. If you have any questions, please call Ms. Cindy Evans at the GRE Program office, (609) 951-1563.

Council of Graduate Schools, 1992

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CGS/GRE Survey of Graduate Enrollment Taxonomy

Biological Sciences
- Agriculture
- Biological Sciences

Business
- Accounting
- Banking and Finance
- Business Administration and Management
- Business, Other

Education
- Administration
- Curriculum and Instruction
- Elementary Education
- Evaluation and Research
- Higher Education
- Secondary Education
- Special Education
- Student Counselling and Personnel Services
- Education, Other

Engineering
- Chemical
- Civil
- Electrical and Electronics
- Industrial
- Materials
- Mechanical
- Engineering, Other

Health Sciences
- Health and Medical Sciences

Humanities and Arts
- Arts - History, Theory, and Criticism
- Arts - Performance and Studio
- English Language and Literature
- Foreign Language and Literature
- History
- Philosophy
- Humanities and Arts, Other

Physical Sciences
- Chemistry
- Computer and Information Science
- Earth, Atmospheric, and Marine Science
- Mathematical Sciences
- Physics and Astronomy
- Natural Sciences, Other

Public Administration and Services
- Public Administration
- Social Work

Social Sciences
- Anthropology
- Economics
- Political Science
- Psychology
- Sociology
- Social Sciences, Other

Other Fields
- Architecture and Environmental Design
- Communications
- Home Economics
- Library and Archival Sciences
- Religion and Theology
- All Other Fields

Council of Graduate Schools, 1992

Council of Graduate Schools
One Dupont Circle, NW, Suite 430
Washington, DC 20036-1173

Contact:
Peter D. Syverson
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Graduate Record Examinations Program
Educational Testing Service
Princeton, NJ 08541-6000

Contact:
Jacqueline B. Briel
609/951-1545

■ *The CGS/GRE Survey of Graduate Enrollment*

Since 1986, the Council of Graduate Schools and the Graduate Record Examinations Board have conducted an annual survey of graduate enrollment and degrees at the approximately 630 institutions that are members of the Council or its regional affiliates.

Methodology

The survey is conducted each fall. Institutions provide data on graduate enrollment and applications for the fall term, and data on degrees conferred during the previous (12-month) school year. Total data, as well as data from up to 51 individual disciplines, are collected from each institution. Consistently, more than 90% of the institutions complete and return the survey.

Data

Enrollment: Includes enrollment by gender, ethnicity, citizenship, enrollment status (full-time and part-time), and first-time enrollment for the fall term.

Applications: Includes the number of complete applications submitted for the fall term, applications accepted, and applications not accepted.

Degrees: Includes number of master's and doctoral degrees conferred by gender.

Reporting

The data are cross-referenced by institutional variables such as public or private affiliation, highest degree granted, and institution-type categories based on the Carnegie Classification system. Discipline data are grouped into nine broad fields plus "other." Trends in graduate enrollment and degrees since 1986 are reported in addition to the single-year data.

Data Availability: Survey results are published in the annual *Graduate Enrollment and Degrees*, available from CGS. Early release data and special reports are also published in the Council's newsletter, the *CGS Communicator*. Data from earlier survey years, as well as appendices providing taxonomies, response rates and other information, are available from the GRE Program in their *Annual Report*.